WHAT IS CLAIMED IS:

1. A POS-based bar code symbol reading system having an integrated customer-kiosk terminal.

2. A POS-Based Bar Code Reading System With An Integrated Customer-Kiosk Terminal is installed in the countertop surface so that (i) the cashier is capable of entering product price information into the computer-based cash register system during the check-out of weighed purchase items, while (ii) the customer is able to view the price, weight and item-identity data of scanned items on the LCD panel located on the customer side of the system.

3. A POS-Based Bar Code Reading System With An Integrated Internet-Enabled Customer-Kiosk Terminal, wherein a POS-Based Bioptical Laser Scanning Bar Code Reading Unit is integrated with a Cashier-Scale-Terminal/ Customer-Kiosk-Terminal Module via a housing interconnection technique, and wherein the POS-based bioptical scanning unit supports a produce weigh tray having a recessed surface region for slidably receiving the full weight of produce items under gravitational loading so that the full weight of the produce items to be purchased is accurately measured by an electronic produce scale integrated within the bottom portion of the POS-based bioptical scanning unit.

4. A POS-Based Bar Code Reading System With An Integrated Internet-Enabled Customer-Kiosk Terminal, wherein its ATM submodule is removably detachable from a first installation port provided on the right side of the Cashier-Scale-Terminal/Customer-Kiosk-Terminal Module, and its voice-over-IP courtesy phone submodule is removably detachable from a second installation port provided on the left side of the Cashier-Scale-Terminal/Customer-Kiosk-Terminal Module.

5. A POS-Based Bar Code Reading System With An Integrated Internet-Enabled Customer-Kiosk Terminal, wherein the cashier at the POS station faces the vertical scanning window of a POS-based Bioptical Laser Scanning Bar Code Reading Unit as well as a cashier-scale-terminal (with LCD panel and membrane keyboard) provided on the cashier's side of the POS-Based

Laser Scanning Bar Code Reading System, while the customer faces (i) an Internet-enabled customer-Kiosk Terminal (with LCD panel and touch-screen keyboard integrated therewith) provided on the cashier's side of the system, as well as (ii) the financial transaction terminal associated with the ATM submodule, (iii) the hand-set associated with the voice-over-IP phone module, and (iv) the courtesy desk surface disposed beneath the customer-kiosk transaction terminal.

6. A POS-Based Bar Code Reading System With An Integrated Internet-Enabled Customer-Kiosk Terminal, wherein the display screen associated with the customer kiosk terminal is provided with an Advertisement/Promotion Mode of display operation so that it is capable of displaying advertisements and promotions (of the hosting retailer or other retailers) while the cashier is not scanning products and the price and product information thereof is being displayed during its Price/Product Information Display Mode.

7. A POS-Based Bar Code Reading System With An Integrated Internet-Enabled Customer-Kiosk Terminal, wherein such advertising and promotions can relate to the products offered for sale in the hosting retailer store, services and products offered for sale in local and/or regional markets, as well as community news, sporting events, recreational events as well as local educational programs and the like.

8. A POS-Based Bar Code Reading System With An Integrated Internet-Enabled Customer-Kiosk Terminal, comprising one or more of the following components: a plurality of VLDs, light focusing optics, scanning motors and scanning optics for producing and scanning laser scanning beams so as to project a laser scanning pattern through the horizontal and vertical scanning windows of the system, and scan bar codes on objects being moved thereby by the cashier, and light collection optics for collecting the focusing the return laser light signal for subsequent photodetection; a plurality of laser scan data generator and processing modules including a plurality of photodetectors, for producing scan data signals, that are ultimately decode-processed in order to produce symbol character data representative of the bar code symbol scanned by the system; a microprocessor, memory architecture, system bus architecture (having different levels

of buses) and an I/O interface connected to such buses for enabling the collection, processing and transport of data elements generated by the various components in the system; a cashier–scale terminal having a LCD panel, keypad and associated circuitry; a customer-transaction terminal (i.e. having a LCD panel, a keypad, a magstripe reader, and associated circuitry); Internet-enabled customer-kiosk terminal (i.e. computer subsystem) realized as a microcomputing system running an operating system (OS), networking software to support the TCP/IP protocol, Internet access software (e.g. Web browser software such as Microsoft Explorer) to access the WWW and other information resources on the Internet, and peripheral hardware and software components such as a LCD panel, touch-screen keypad mounted thereon, and a speech/voice recognition interface and a barcode symbol reader integrated with the microcomputing system; a voice-over-IP telephone handset integrated with the microcomputing system, and having software components running thereon to support its voice communication functions over the Internet, or alternatively, over a Public Telecommunications Switching Network (PTSN) in a manner known in the art; a network interface controller (NIC) card operably connected to system bus architecture, for enabling data packet communications over an packet-switched information network (e.g. Internet); an multiport Ethernet hub device connected to the NIC card and the Internet-enabled customer-kiosk terminal, so that entire POS-Based Bar Code Reading System With Internet-Enabled Customer-Kiosk Terminal has one or more Ethernet data ports for operable connection to a TCP/IP network such as a retail LAN which, in turn, is connected to the Internet.

9. A POS-Based Bar Code Reading System With An Integrated Internet-Enabled Customer-Kiosk Terminal, which comprises a POS-Based Bioptical Laser Scanning Bar Code Reading Unit integrated with a Cashier-Scale-Terminal/Customer-Kiosk-Terminal Unit and contained in a housing of generally unitary construction.

10. A POS-Based Bar Code Reading Cash Register System With An Integrated Internet-Enabled Customer-Kiosk Terminal, comprising a POS-Based Bottom-Type Bar Code Reading Unit which is integrated with a Cashier-Scale-Transaction-Terminal/Customer-Kiosk-Terminal Unit and enclosed in a scanner/kiosk housing of unitary construction.

11. A POS-Based Bar Code Reading Cash Register System, wherein an electronically-controlled cash drawer is operably associated with the system, and mountable beneath a counter surface.

12. A POS-Based Bar Code Reading Cash Register System With An Integrated And Internet-Enabled Customer-Kiosk Terminal, comprising: a cashier transaction terminal (with a LCD panel and a membrane keyboard) provided on the cashier's side of the system; a customer-kiosk transaction terminal (with a LCD panel and a touch-screen keyboard integrated therewith) supported on a customer-transaction module on the customer's side of the system; a transaction terminal associated with an ATM submodule mounted to a first side of the scanner/kiosk housing; a hand-set associated with the voice-over-IP phone module mounted to the second side of the scanner/kiosk housing; and a courtesy desk surface disposed beneath the customer-kiosk transaction terminal.

13. A POS-Based Bar Code Reading Cash Register System With An Integrated And Internet-Enabled Customer-Kiosk Terminal, comprising one or more of the following components: a plurality of VLDs, light focusing optics, scanning motors and scanning optics for producing and scanning laser scanning beams so as to project a laser scanning pattern through the horizontal scanning window of the system, and scan bar codes on objects being moved thereby by the cashier, and light collection optics for collecting the focusing the return laser light signal for subsequent photodetection; a plurality of laser scan data generator and processing modules including a plurality of photodetectors, for producing scan data signals, that are ultimately decode-processed in order to produce symbol character data representative of the bar code symbol scanned by the system; a microprocessor, memory architecture, system bus architecture (having different levels of buses) and an I/O interface connected to such buses for enabling the collection, processing and transport of data elements generated by the various components in the system; a cashier–scale-transaction terminal having a LCD panel, keypad and associated circuitry, for entering and processing information relating to (i) purchase items to be weighed by the electronic scale subsystem, as well as (ii) customer information enabling a consumer transaction to be transacted at the system, and enable the opening of the electronically-controlled cash drawer during the appropriate stage of the consumer transaction; a customer-transaction terminal (i.e. having a LCD panel, a keypad, a magstripe reader, and associated circuitry);

Internet-enabled customer-kiosk terminal (i.e. computer subsystem) realized as a microcomputing system running an operating system (OS), networking software to support the TCP/IP protocol, Internet access software (e.g. Web browser software such as Microsoft Explorer) to access the WWW and other information resources on the Internet, and peripheral hardware and software components such as a LCD panel, touch-screen keypad mounted thereon, and a speech/voice recognition interface and a bar code symbol reader integrated with the microcomputing system; a voice-over-IP telephone handset integrated with the microcomputing system, and having software components running thereon to support its voice communication functions over the Internet, or alternatively, over a Public Telecommunications Switching Network (PTSN) in a manner known in the art; a network interface controller (NIC) card operably connected to system bus architecture, for enabling data packet communications over an packet-switched information network (e.g. Internet); an multiport Ethernet hub device connected to the NIC card and the Internet-enabled customer-kiosk terminal so that entire POS-Based Bar Code Reading System With Internet-Enabled Customer-Kiosk Terminal has one or more Ethernet data ports for operable connection to a TCP/IP network such as a retail LAN which, in turn, is connected to the Internet.

14. A POS-Based Bar Code Reading Cash Register System With An Integrated And Internet-Enabled Customer-Kiosk Terminal, wherein by virtue of its novel construction, the POS-Based Bar Code Reading Cash Register System With An Integrated Internet-Enabled Customer-Kiosk Terminal is capable of performing all of the functions enabled by prior art POS-based checkout counter systems, with the advantage that the system of the present invention does so in a system form factor having a unitary construction that occupies only a fraction of the space required by the prior art, while enabling a variety of Internet-based services that offer real value to customers as they are checking out their purchase items.

15. A POS-Based Bar Code Reading Cash Register System With An Integrated And Internet-Enabled Customer-Kiosk Terminal, wherein a POS-Based Vertical/Projection-Type Laser Scanning Bar Code Reading Unit is integrated with a Cashier-Transaction-Terminal/Customer-Kiosk-Terminal Unit which are enclosed in a housing of unitary construction.

16. A POS-Based Bar Code Reading Cash Register System With An Integrated And Internet-Enabled Customer-Kiosk Terminal, wherein an electromagnetic-based demagnetization coil structure is contained with a thin support base plate, for demagnetizing product security tags, labels and the like during retail checkout operations.

17. A POS-Based Bar Code Reading Cash Register System With An Integrated And Internet-Enabled Customer-Kiosk Terminal, wherein an electronically-controlled cash drawer is mounted beneath a counter surface, is operably associated with the system.

18. A POS-based checkout station embodying any one of the POS-based bar code reading systems claimed herein.

19. A method of checking out products and produce items in a retail store environment.

20. A method of displaying product and service advertisements in physical retail store environments, while customers checkout their purchased items.

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